

<u>XbaI</u>	*	<u>HgaI</u>	<u>PstI</u>	<u>HgaI</u>
<u>TCTAGAGTC</u>	ATGAAACAAC	AAAAACGGCT	TTACGCCCGA	TTGCTGACGC
				TGTTATTTGC
				<u>HgaI</u>
GCTCATCTTC	TTGCTGCCCTC	ATTCTGCAGC	AGCGGGGCA	AATCTTAATG
				GGACGCTGAT
GCAGTATTTT	GAATGGTACA	TGCCCAATGA	CGGCCAACAT	TGGAAGCGTT
				TGCAAAACGA
CTCGGCATAT	TTGGCTGAAC	ACGGTATTAC	TGCCGCTCTG	ATTCCCCCGG
				CATATAAGGG
AACGAGCCAA	GCGGATGTGG	GCTACGGTGC	TTACGACCTT	TATGATTTAG
				GGGAGTTTCA
TCMAAAAGGG	ACGGTTCGGA	CAAAGTACGG	CACAAAAGGA	GAGCTGCAAT
				CTGCGGATCAA
AAGTCTTCAT	TCCCGCGACA	TTAACGTTTA	CGGGGATGTG	GTCAATCAACC
				ACAAAAGGCGG
CGCTGATGCG	ACCGAAGATG	TAACCGCGGT	TGAAGTCGAT	CCCGCTGACC
				GCAACCGCGT
AAATTCAGGA	GAACACCTAA	TTAAAGCCTG	GACACATTTT	CATTTTCCGG
				GGCGCGGCAG
CACATACAGC	GATTTTAAAT	GGCATTGGTA	CCATTTTGAC	GGAAACCGATT
				GGGACGAGTC
CCGAAAGCTG	AACCGCATCT	ATAAGTTTCA	AGGAAAGGCT	TGGGATTGGG
				AAGTTTCCAA
TGAAAACGGC	AACATATGATT	ATTTGATGTA	TGCCGACATC	GATTATGACC
				ATCCTGATGT
CGCAGCAGAA	ATTAAGAGAT	GGGGCACTTG	GTATGCCAAT	GAACTGCAAT
				TGGACGGTTT
CCGTCTTGAT	GCTGTCAAAC	ACATTAAATT	TTCTTTTTTG	CGGGATTGGG
				TTAATCATGT
CAGGGAAAAA	ACGGGGAAGG	AAATGTTTAC	GGTAGCTGAA	TATTGGCAGA
				ATGACTTGGG

BamHI

AGCAATCTG TCGAAATGA CGGTATCGCG GGTGATCA

FIGURE 3

Oligonucleotide duplex A

5' GGGTTTATTATTTTAAATTTCTTTCAAAATACTTCCACCATGGGTAACGGATCCA 3' SEQ ID NO:6
3' CCCAAAAATAAAATTTAAAGAAAGTATTATGAAGTGGTACCCATTGCCTAGGTTCCA 5' SEQ ID NO:7

Oligonucleotide duplex B

NcoI [] HgaI SITE
[] α-AMYLASE

5' CATG | GCAAATCTTAATGGACGCTGATG 3' SEQ ID NO:8
3' CGTTAGAAATTACCCTGCCGACTACGTCAT 5' SEQ ID NO:9
Met' mature α-Amylase

FIGURE 2 A

<u>XbaI</u>	*	<u>HqaI</u>	<u>PstI</u>	<u>HqaI</u>	<u>HqaI</u>
<u>TCTAGAGTC</u>	ATGAAACAAC	AAAAACGGCT	TTACGCCCGA	TTGCTGACGC	TGTTATTTCG
GCTCATCTTC	TTGCTGCCCTC	ATTCTGCAGC	AGCGGCGGCA	AATCTTAATG	<u>GGACGCTGAT</u>
GCAGTATTTT	GAATGGTACA	TGCCCAATGA	CGGCCAACAT	TGGAAGCGTT	TGCAAAACGA
CTCGGCATAT	TTGGCTGAAC	ACGGTATTAC	TGCCGTCTGG	ATTCCCCCGG	CATATAAGGG
AACGAGCCAA	GCGGATGTGG	GCTACGGTGC	TTACGACCTT	TATGATTTAG	GGGAGTTTCA
TCAAAAAAGG	ACGGTTCGGA	CAAAGTACGG	CACAAAAGGA	GAGCTGCAAT	CTGCGATCAA
AAGTCTTCAT	TCCCGCGACA	TTAACGTTTA	CGGGGATGTG	GTCAATCAACC	ACAAAGGCGG
CGCTGATGCG	ACCGAAGATG	TAAACCGCGT	TGAAGTCGAT	CCCGCTGACC	GCAACCGCGT
AAATTTCAGGA	GAACACCTAA	TTAAAGCCTG	GACACATTTT	CATTTTCCGG	GGCGCGGCAG
CACATACAGC	GAATTTTAAAT	GGCATTTGTA	CCATTTTGAC	GGAAACCGATT	GGGACGAGTC
CCGAAAGCTG	AACCGCATCT	ATAAGTTTCA	AGGAAAGGCT	TGGGATTGGG	AAGTTTCCAA
TGAAAAACGGC	AACATATGATT	ATTTGATGTA	TGCCGACATC	GATTATGACC	ATCCTGATGT
CGCAGCAGAA	ATTAAGAGAT	GGGGCACTTG	GTATGCCAAT	GAACTGCAAT	TGGACGGTTT
CCGTCTTGAT	GCTGTCAAC	ACATTAAATT	TTCTTTTTTG	CGGGATTGGG	TTAATCATGT
CAGGGAAAAA	ACGGGGAAGG	AAATGTTTAC	GGTAGCTGAA	TATTGGCAGA	ATGACTTGGG

FIGURE 2 B

CGCGCTGGAA AACTATTTGA ACAAACAAA TTTTAATCAT TCAGTGTTTG ACGTGCCGCT
 TCATTATCAG TTCCATGCTG CATCGACACA GGGAGGCGGC TATGATATGA GGAATTTGCT
 GAACGGTACG GTCGTTTCCA AGCATCCGTT GAAATCGGTT ACATTTGTCG ATAACCATGA
SalI

TACACAGCCG GGGCAATCGC TTGAGTCGAC TGTCCAAACA TGGTTTAAGC CGCTTGCTTA
 CGCTTTTATT CTCACAAGGG AATCTGGATA CCTCAGGTT TTCTACGGGG ATATGTACGG
 GACGAAAGGA GACTCCCAGC GCGAAATTCC TGCCTTGAAA CACAAAATTG AACCGATCTT
 AAAAGCGAGA AAACAGTATG CGTACGGAGC ACAGCATGAT TATTTCGACC ACCATGACAT
 TGTCGGCTGG ACAAGGGAAG GCGACAGCTC GGTGCAAAAT TCAGGTTTGG CGGCATTAAT
 AACAGACGGA CCCGGTGGG CAAAGCGAAT GTATGTCGGC CGCAAAACG CCGGTGAGAC
 ATGGCATGAC ATTACCGGAA ACCGTTCCGA GCCGGTTGTC ATCAATTCCG AAGGCTGGG
 AGAGTTTCAC GTAAACGGCG GGTCCGGTTC AATTATGTT CAAAGATAGA AGAGCAGAGA

BamHI

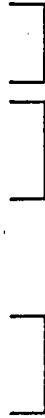
GGACGGATTT CCTGAAGGAA ATCCGTTTTT TTATTTTGCC CGTCTTATAA ATTCTTTGA
 TTACATTTTA TAATTAAATT TAACAAAGTG TCATCAGCCC TCAGGAAGGA CTTGCTGACA
 GTTTGAATCG CATAGGTAAG GCGGGGATGA AATGGCAACG TTATCTGATG TAGCAAAGAA
BclI

AGCAATGTG TCGAAAATGA CGGTATCGCG GGATGATCA Seq 17 NO: 5

FIGURE 3

Oligonucleotide duplex A

NcoI BamHI HindIII



5' GGGTTTATTTTAAATTTTCTTTCAAATACTTCCACCATGGGTAACGGATCCA 3'
 3' CCCAAAATAAAAAATTAAAGAGTTTATGAAGGTGGTACCCATTGCCCTAGTTCCA 5'

SEQ ID NO: 6
 SEQ ID NO: 7

Oligonucleotide duplex BHgaI SITE
α-AMYLASE

NcoI



5' CATG GCAAACTCTTAATGGACGCTGATG 3' SEQ ID NO: 8
 3' CGTTAGAATTACCTGCGACTACGTCAT 5' SEQ ID NO: 9

Met' mature α-Amylase